ASTP (USA) MISSION MC54/1 Time: 15:14 CDT, 24:46 GET

Date: 7/15/75

PAO This is Apollo Control at 27 minutes, 35 seconds. We've had loss of signal through Madrid and we will be returning to the Kennedy Space Center for a replay of postlaunch remarks, in the launch control center. Remarks from NASA administrator James Fletcher, and from the Soviet Ambassador to the United States, Anatole Dobrynin.

PAO May I have your attention please? We have had the privilege of having in the viewing room with us today two very distinquished guests, and they would like to make a few remarks. First I would like to introduce our big boss, the administrator of NASA, Dr. James Fletcher.

FLETCHER Needless to say, that was an absolutely fabulous launch, by an absolutely fabulous team. And let me congratulate you all before I say anything further. You probably know as well as I do that you are making history today. And this is the first step on a long mission, but also on, I think a long program with the Soviet Union. Congratulations all on a job extremely well done. I'm probably a lot more excited than you are but, anyway, it's just fabulous. Thank you.

PAO And now, I'm particularly honored to present a very special guest for this mission, the Ambassador from the Soviet Union, Mr. Dobrynin.

DOBRINA Well done. This is really what I mean. Before I had a chance to (garble) and my heart is with you. (garble) Very nice job. I should say that without your American proformance, here in our Russian Control Center the whole program Would be - would be imposible. We're looking forward to and I wish all of you gathering here and (garble) and especially our friends, the astronauts that are now high, I guess 160 kilemeters. (garble) Well done, and thank you very much. Best wishes to all of you, and to both of our teams as they are up in the cosmos. Thank you very much.

We've just seen another truly professional performance from a great team. All good things must come to an end, and it seems like this is an appropriate time for the Saturn Launch Program to end. And it's being done with a particularly important mission. A few of you have received specific individual recognition for your part in this program. Most of you have not, and that's the way it is with a large team. But all of you can take with you the self-esteem, perhaps the greatest reward of all, from the fact that you've been a member of the team that has made a fantastic contribution to our country. And now as you go your separate ways over these next few weeks, I'd like to thank all of you and wish you the best in your future ventures. God speed to you all.

PAO Apollo - - END OF TAPE

ASTP (USA) MC55/1

Time: 15:43 CDT, 01:43 PET

7/15/75

This is Apollo Control at 53 minutes, and Apollo now PAO coming up on acquisition through the Apollo range instrument aircraft, an ARIA aircraft on station south of Australia, and we'll have communications, we expect, through that tracking aircraft. Over the ARIA during our contact through ARIA, CAP COMM Dick Truly will be discussing with the crew a telemetry indication that we got postlaunch that indicates that there may be a small bubble in the propellant supply module. Now, this is an auxillary propellant supply for the reaction control system engines normally brought online at 1 hour 44 minutes, and Truly will be advising the crew to defer bringing that online, if in fact further checks show that there is a bubble in the supply line - a helium bubble - the supply module would simply be purged, forcing the propellants and the bubble out through the RCS engines. The concern about having a bubble, if in fact, there is a helium bubble in there, is that is a critical burn as the bubble entered the RCS reaction control system engines there would be a loss is thrust and a critical burn where timing is of the essence could be affected. So before that module is used, if it is determined that, in fact, we do have a helium bubble in the manifold, it would be purged.

ACDR (Garble)

CC-H Okay. And we'll be standing by.

ACDR (Garble) we have the completed (garble) for our 3-day

(garble).

CC-H Okay.

PAO This is Apollo Control. We had very poor communications through the Vanguard, or rather through the ARIA. We'll be coming up on Vanguard - -

CC-H - Houston. We're I minute from LOS, ARIA. I'll give you a call at the Vanguard in an hour and 12 minutes.

ACDR I read you. Okay, Dick.

PAO And CAP COMM Dick Turly advising the crew that he'll be giving them a call at 1 hour 12 minutes. We are now at 1 hour 45 seconds so the call will come in about 12 minutes from now. Immediately following the Vanguard pass, at approximately 5:05 eastern daylight time, we expect to begin the postlaunch press conference at the Kennedy Space Center.

PAO And we'll leave the line up for that Vanguard pass coming up in about 11 minutes.

ACDR (Garble)

ASTP (UGA) MC56/1 Time: 01:03 CDT, 15:53 PET 7/15/75

PAO This is Apollo control at one hour, 12 minutes, coming up on acquisition through the tracking ship Vanguard, and we have acquisition of signal through Vanguard.

CC-H Apollo, Houston, Vanguard for six minutes.

ACDR Okay. We're in attitude - gonna be doing the TD and E in 2 minutes, Dick. We're - set up is 58:08 and counting.

CC-H Okay, Tom. Super. And Deke, reminder on the TV camera. We don't have any way of monitoring it on the VTR, so when you get turned around and get a monitor picture, you might select the f-stop required and also peak instead of average if that's required.

DMP Okay. We're sitting here looking at the monitor now, but of course we can't see much in it. (Garble)

CC-H Roger. Understand.

PAO Tom Stafford reporting that spacecraft is in attitude and ready to do transposition and docking.

ASTP (USA) MC57/1

Time: 16:02, CDT 01:12 PET

7/15/75

PAO Tom Stafford reporting that spacecraft is in attitude and ready to do transposition and docking - leading us to believe that the Apollo has separated a little bit early from the S4B and is in possition now having turned around 180 degrees to move in and dock with the docking module. And exact the docking module from the S4B Saturn second stage.

ACDR We're off the (garble).

ACDR The panel is really going away.

CC-H Roger, Tom.

CC-H Apollo, Houston. One cleanup on the switches on panel 3. S band AUX TV, we need to OFF.

DMP AUX TV - OFF.

CC-H Okay, thanks Deke, and also we've lost a telemetry parameter on 02 tank 1 quantity. If you could read - give us an onboard readout, we'd appreciate it.

DMP Stand by one. CC-H Okay, no hurry.

ACDR Sick, we've got a problem. It's so bright in that back-ground I can't see my COAS.

CC-H Roger, copy.

PAO Tom Stafford reporting that he's having some difficulty seeing the docking target through the optical aline sight. This is used in lining up the command module for docking with the docking module. Stafford reported that the background is a little too bright.

CC-H Apollo, Houston. We're about 30 seconds from LOS. I'll give you a call - real short pass at Rosman at 6 - at 1 plus 38.

ACDR And I finally got the COAS back in finally.

CC-H Roger, Tom.

PAO This is Apollo Control at one hour 19 minutes and we're nearing loss of signal now through the tracking ship Vanguard. Tom Stafford gave us one brief report that he appeared to have the crew optical aline sight operating properly. And I expect that the crew will be proceding now with the docking and extraction of the docking module. At this time we're ready to switch to the Kennedy Space Center, for the postlaunch press conference. This is Apollo Control at one hour 19 minutes.

ASTP (USA) MC58/1

Time: 16:27 CDT 01:36 PET

7/15/75

PAO This is Apollo Control. One minute - one hour, 36 minutes into the flight of Apollo. Now in an orbit measuring 92.4 by 83.1 nautical miles. We're expecting acquisition of Apollo through the Rosman station. We're starting to get some data through Rosman. We'll stand by for this pass.

CC-H Apollo, Houston at Rosman for a real short pass about one minute. How do you read?

ACDR Roger. Got a good hard dock. It looks real lined up and all the latches are good.

CC-H Okay. Super, Tom. This pass is real short so I won't bug you now. There are two or three things that we wanted to get from you like the P52 data, and the AMS delta V results, but I can pick them up at Newfoundland, and that's coming up at about an hour and 42 minutes.

DMP Okay. Over. We're kind of busy. We'll pick it up there, Dick.

CC-H Okay. No problem.

DMP Couple of quickies you can look at Dick. We're running high on suit temp here - a little over 70 degrees and also the glycol evap on the secondary loop is off scale high. Should be below 60.

CC-H Okay, Deke. We don't have data here but we will be looking at those. I've got a couple of parameters I'm gonna need a readout on from you also.

DMP Okay.

CC-H See ya'll later.

DMP Lets see, I can give you the 52 data here if you've got time to copy it.

CC-H We're going over the hill, Deke. Let me get it later.

DMP Okay.

CC-H Apollo, Houston. Newfoundland for six minutes.

CMP Copy.

DMP H4-5 in the launch checklist connecting - Vance is connecting the umbilicals.

CC-H Roger. Tom, how do you read me?

ACDR Clear.

CC-H Okay. Be advised, we're going to be sending one of our nominal commands here to the booster to emable the extraction maneuver to occur per the nominal flight plan.

ACDR Your projectory people - we each had a panel - Deke and I a trail down below us and out in front of us (garble).

CC-H Apollo, Houston. Tom, you're fading in and out and I'm only getting about half of your conversation.

ACDR I'll call you in a minute.

CC-H Okay.

ACDR Houston, right now in the middle of this checklist Deke; s power's off. His comm power's off, but also it looks like Vance's headset went out, but we'll call you on that later, over.

CC-H Okay, Tom. Copy. And Tom, that transmission I heard loud and clear.

ACDR Okay.

CC-H Apollo, Houston. We still have about three minutes

ASTP (USA) MC58/2

Time: 16:27 CDT 01:36 PET

7/15/75

here in Newfoundland if somebody has time to read me the P-52 data and launch checklist, that's fine. Otherwise, we can pick it up at Madrid.

ACDR Deke can get it.

DMP Okay, ready Dick? CC-H Yes, go ahead Deke.

DMP Okay, star 27 and star 43. All balls; minus 36, minus 1, plus 137, and we torqued it 35 minutes and 20 seconds.

CC-H Okay, Deke, copy. Thank you very much.

CMP And Dick, CP here. We found out why I lost Tom when I took the tunnel hatch number 1 out - why, we dragged it through the tunnel and it turned off my headset switch here on panel 98.

CC-H Okay. Vance, read you loud and clear now. One more thing. We've got a - we're lost a couple of TM parameters if somebody is up around panels 2 or 3 and you can read us two quan - two points we'd appreciate it.

ACDR Dick, I'm available.

CC-H Okay. We need 02 tank 1 quantity.

ACDR Quantity is reading zero.

CC-H Okay. We're reading all scale low. Also, we don't think we have a problem there but it's TM. Also, we need quad alpha helium tank temperature.

ASTP (USA) MC59/1

Time: 16:36 CDT, 01:46 PET

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CC-H - but it's TM. Also we need quad alpha helium tank temperature.

ACDR Getting three zero also.

CC-H Okay, and the same thing applies to that one.

CC-H Apollo, Houston. We're one minute til LOS. I'll

give you a call at Madrid in an hour and 51 minutes.

CMP 1:51.

CC-H Apollo, Houston. Madrid for 3! minutes.

DMP Okay, Dick. And it's worth noting on those gage discrepencies that they were reading okay when we went through our systems check, so those things have dropped considerably quite recently.

CC-H Okay. We copy and we'll be taking a look at that Deke. And we do think that the - both the primary and secondary loops are working okay and it'll be running a little warm for a little while but we think it'll be doing fine.

DMP Okay.

 $_{\mbox{\footnotesize{CC-H}}}$  One thing we wanted to get from you was the results of the EMS delta V test that you ran.

DMP Okay, EMS delta V test was perfect.

DMP That was minus 10.5 Dick.

Okay, copy and incindentally one thing - a couple of things on the flight plan. We'll be getting the GDC IMU comparison results down at the Vanguard. And also down at the Vanguard at about 2 hours and 42 minutes - 44 minutes or so, we plan on delaying the PSM activation until tomorrow. The reason is because of the switch manipulations that we went in - went through on the pad, we think we probably have a little helium bubble in that line and by doing it tomorrow we'll have the evening to think about what's the best way to get it out. We probably - we may be able to get it out without doing an extra purge burn.

DMP Okay.

CC-H In any case, it's no problem.

DMP Roger.

CMP And Dick, we have the umbilicals connected to the DM and the hatch is back in again. And all latches were good.

and the hatch is back in again. And all latters wer

CC-H Okay, Vance. Thank you.

CC-H Apollo, Houston. We're about a minute from LOS. We'll see you at ARIA at 2 plus 27 and when we got a - got a little minute here we can't help but ask you how Vance and Deke are both liking the zero G.

DMP Just super, man - you just can't believe it.

CMP Really savoring every event up here, Dick. It's

really great.

CC-H Sounds like fun. Wish I was there.

DMP You bet. So do we.

DMP Tell you one thing is these TV cameras don't

ASTP (USA) MC59/2 Time: 16:36 CDT, 01:46 PET 7/15/75

work any betterin Zero G then- - CC-H (Laughter) Roger.

ASTP (USA) MC60/1

Time: 16:46 CDT, 01:56 PET

7/15/75

This is Apollo Control. 1 hour 56 minutes into the flight of Apollo and 9 hours and 26 minutes since the launch of Soyuz. We have had loss of signal through a succession of stations: Rosman, Newfoundland, and Madrid, across the states, and Europe. Our next voice contact with Apollo will be in approximately 31 minutes through an aircraft over the Indian Ocean. We'll return at that time. All apparently going well aboard Apollo. Tom Stafford reporting that all latches were locked solidly after a good hard docking with the docking module. Extraction will - is scheduled to take place during the pass above the ARIA aircraft, the instrumented aircraft, in the Indian Ocean. We'll return at that time. 30 minutes to acquisition according to the next station contact table. This is Apollo Control, 1 hour 58 minute Apollo ground elasped time.

ASTP (USA) MISSION MC61/1 Time: 17:15 CDT 02:25 PET

Date: 7/15/75

PAO This is Apollo Control. 2 hours 25 minutes into the flight of Apollo. 9 hours 55 minutes since Soyuz launched this morning. And we're less than a minute away from acquisition through an aircraft, a relay aircraft over the Indian Ocean. And further communications with the Apollo spacecraft. Some heart rates for the Apollo crew during launch, Tom Stafford had a high of 130 and a low of 55. Command module pilot Vance Brand had a high of 114 and a low of 60. Docking module pilot Deke Slayton had a high of 123, and a low of 60. We should have acquisition momentarily for the next 5 minutes through the relay aircraft. Standing by.

CC-H Apollo, Houston through ARIA. How do you read?

USA (garble)

PAO Roger. Again the comm here is pretty poor, so we're just standing by.

CC-H Apollo, Houston. We're 30 seconds from LOS ARIA. Vanguard at 2 plus 43.

ASTP (USA) MC62/1

Time: 17:25 CDT 02:35 PET

7/15/75

PAO This is Apollo Control. Loss of signal through the ARIA relay aircraft. Voice relay in the Indian Ocean. Four minutes from reacquisition through tracking ship Vanguard for the final time this afternoon of spacecraft Apollo. We're estimating the first Apollo change of shift briefing with Flight Director Pete Frank, for 7:30 PM central daylight time. The change of shift briefings for this mission will all be in the main auditorium at Johnson Space Center. As we get nearer to the shift handover, we'll refine this estimate of the time of the change of shift briefing. We will leave the circuit for the next 3 minutes for the acquisition through the tracking ship Vanguard. At 2 hours 40 minutes Apollo ground elapsed time, Apollo Control.

CC-H Apollo, Houston. Vanguard for 5 minutes.

ACDR Okay. Houston, Apollo. Extraction was nominal.

CC-H Super, Tom. Sounds real good then if somebody - -

Apollo, Houston. You still there?

ACDR Go ahead, Dick.

CC-H Roger, Tom. If somebody has a chance during this pass, I'd like get the BMAG GDC IMU comparison results.

ACDR Okay. Deke will give it to you.

CC-H Okay. And as I said before, we're not going to do the PSM activation here, we'll pick it up later.

DMP Okay. Want to go the BMAG?

CC-H Okay. I'm standing by to copy.

ACDR Okay. NOUN 20 is 359 86 01648 358 15 (garble).

CC-H Break - Break, Deke. Excuse me Deke. You - we had some extra noise on the line and I copied the roll, pitch, and yaw of the NOUN 20, but nothing else. Go ahead.

DMP Okay. GDC is 0016 0172 3590. And Delta V is 3000.

CC-H Roger. Sounds good. And I'm assuming that was

BMAG 2. Is that right?

DMP That's affirmative.

CC-H Okay. Great.

ASTP (USA) MC63/1

Time: 17:35 CDT, 02:45 PET

7/15/75

CC-H Apollo, Houston. We are about one minute from LOS. Goldstone comes up at 3 hours and 1 minute. See you there.

ACDR Okay.

DMP Those Earth obs guys will be happy to know - -

CC-H I'm sorry, Deke, say it again.

This is Apollo Control. Loss of signal through PAO tracking ship Vanguard in the South Central Pacific. Next station to pick up Apollo will be tracking station in Goldstone near Barstow, California, in the Mojave Desert. Almost directly overhead of Goldstone 89 1/2 degrees and we can't hardly get more straight up than that. We have two telegrams that were exchanged between the director of - acting President of the USSR Academy of Sciences Academician V. A. Kratelnikow(?) and Doctor James Fletcher, the Administrator of NASA. The telegram from Dr. Fletcher to Kratelnikov(?) reads as follows: Congratulations to the USSR launch team for the successful launch of the spacecraft Soyuz. best wishes to cosmonauts Leonov and Kubasov on behalf of all of NASA. And it is signed by Dr. Fletcher and his Deputy George M. Lowe. telegram from kratelnikov(?) to Fletcher reads as follows: In the name of the USSR Academy of Sciences we congratulate you on the successful launch of the spacecraft Apollo and the begining of the ASTP flight. Respectfully Academician V. A. Fratelnikov(?) Acting President, USSR Academy of Sciences. Academician BM Petrov and everyone at the Intercosmos Council join me in this sentiment. Tom Stafford during this pass over Vanguard reported that they had a nominal extraction of the docking module from the truss that contained it and restrained it in the spacecraft adapter after the panel separated. Did a turnaround docked with the - successfully harddocked - all latches mated. And as reported over Vanguard the docking module was extracted from its hanger. Have to repeat on earlier notification, we're estimateding 7:30 p.m. CDT for the change of shift briefing in the JSC main auditorium with the off-going Flight Director, Pete Frank. Apparently Apollo is in an orbit measuring 92.4 by 83.1 nautical mile with orbital period of 87 minutes 39 seconds, orbital velocity 25,656 feet per second. We'll return in 9 minutes for Goldstone. This is Apollo Control. 2 hours 51 minutes after Apollo launch.

ASTP (USA) MISSION 64/1 Time: 17:50 CDT 03:00 PET

Date: 7/15/75

PAO This is Apollo Control 2 hours 59 minutes, as you were 3 hours into the flight of Apollo. And acquisition in about 40 seconds through tracking station Goldstone. Pass directly across the Goldstone station at the zenith and 89 and one half degrees maximum duration. Goldstone, next station beyond that is the voice relay through Newfoundland. And we'll stay up across Goldstone, Newfoundland, and Madrid. This is Apollo Control standing by.

CC-H Apollo, Houston, Goldstone for 5 minutes.

ACDR We've maneuvered to ACM for the nominal latitude. CC-H Okay, Tom and if you'll give us ACCEPT, we'll give

you a good state vector, and I've got a preliminary ACM pad when you're ready to copy.

ACDR Okay, you've got ACCEPT, Dick. Go ahead.

CC-H Okay, and I understand you are ready to copy the preliminary pad. Tom.

ACDR Give us about 10 seconds.

CC-H Oh, Okay, tell me when you're ready. No hurry. We've got about 5 minutes here.

ACDR Okay, we're ready.

CC-H Okay, starting with NOUN 33: 1 003, 41, 0159 plus 0181 plus four balls plus 0002, 179, 193, 001, 0058, 0001, 06, 123. The Weight: 32879. Trims plus 080 minus 052. Go ahead.

ACDR Okay; 003, 41, 0159 plus 0181 plus all balls, plus 0002, 179, 193, 001, 0058, 0001, 06, 123, 32879. Pitch time plus 080, Yaw trim minus 050, over.

CC-H Roger, Tom. That's a good readback, and you'll notice on there that the delta VC tail OFF is not 13.0, and that's because on this short burn - for this particular short burn there was just no way that we could set it up to come out that way, but that number is correct. Okay, see you later.

CC-H Apollo, Houston, our uplink is complete, you can go back to block. Thank you much.

ACDR Roger.

CC-H Apollo, Houston we're 30 seconds from LOS. I'll give you a call in Newfoundland at 3 plus 12 see you there.

ACDR Roger, 3 plus 12. Thank you.

ASTP (USA) MC65/1

Time: 18:00 CDT, 03:10 PET

7/15/75

CC-H Apollo, Houston. Newfoundland for 6 minutes.

ACDR (GARBLE)

CC-H And Apollo be advised, we do not have an update for the backup GDC aline pad and the star acquisition pad today. And also, if you - I've got some different high gain angles if you have maneuvered to the preliminary pad attitude for ACM.

ACDR Okay, Dick. Go ahead.

CC-H Okay, these are good for the - the attitude for the preliminary pad pitch minus 78, yaw 147.

ACDR Pitch minus 78, yaw 147.

CC-H Roger and naturally I'm talking to you on - VHF in Newfoundland and we'll - I'll talk to you on S band when we get locked up.

ACDR Okay, I'll maneuver to that new attitude.

CC-H Okay.

DMP For your information, Dick, when we powered up that ATS we got a horrendous background noise and it seems to stay there.

CC-H Roger, Deke.

DMP Okay, Houston, how do you read through ATS?

CC-H I'm clear, Deke. How me?

DMP Cleared up the noise. It's amazing.

CC-H How about that?

CC-H We're getting an echo from you and - but we surely got rid of all that background noise since you came on the air.

got rid of all that background holse since you came on the air.

CC-H Incidentally Deke, I remember from one of the tests

that we did down at the Cape when Cripp was down there that he had the same - same thing, when locking up he had a tremendous loud noise but as soon as we got a good lock it went away.

DMP That's exactly what it is.

CC-H Okay.

CC-H Apollo, Houston. When you do this upcoming P52, here, just in the event pick-a-pair didn't work for this attitude, we think stars 42 and 45 will work.

ASTP (USA) MISSION MC66/1 Time: 18:10 CDT 03:19 PET 7/15/75

CC-H Apollo, Houston. How do you read?

ACDR Read you 5 by, Dick. How do you read us.

CC-H Okay. I read you loud and clear too. Comm Tech said you'd called, and I didn't hear you, I wasn't sure whether we had a problem or not. I did make one transmission. When you do this P52, if PICAPAR doesn't work, we think stars 42 and 45 will.

ACDH Rog. I'll (garble) and copy that. And we wanted you to to report to the Cape that they put a hitchicker aboard.

CC-H Okay.

ACDR We found a super Florida mosquito flying around here a few minutes ago.

CC-H (Laughter) Okay. Maybe you could think of a new experiment to do with him.

CMP No. I'm goint to feed him to our fish.

CC-H Okay.

ACDR And Houston, Apollo. Your preliminary pad will be the final pad for ACM. That's affirmative. Over.

CC-H Tom, I'm not sure we have a final pad in work, and I'm not sure whether we are going to need to pass it up to you or not. We will have it ready here in just a second.

ACDR Okay. I've already loaded the preliminary one in the computer in case you didn't have a final.

CC-H Roger. I understand. We were watching you do that, but we do think we may have a final pad. I'll know here in just a minute.

ACDR No rush (Garble)

CC-II Apollo, Houston. Be advised you're GO with the preliminary ACM pad. Also, we're just getting ready to do about 10 minutes of n VTR dump. During the dump you'll lose down voice. In case I need to call you, I'll keep up voice and we're going to stop the dump a couple or three minutes prior to the burn so I'll - we'll have good voice during the burn.

ACDR Okay.

CC-H Okay. See you later.

ACTE (UCA) MC67/1

Time: 18:20 CDT, 03:29 PET

7/15/75

PAO This is Apollo Control. Apollo spacecraft now over the central African continent and we've had loss of signal through the tracking station at Madrid. Next station will be a relay aircraft, Apollo range instrumented aircraft hovering over the Indian Ocean in some 28 minutes. We'll return at that time. This is Apollo Control, 3 hours 33 minutes into the flight of Apollo.

CC-H Apollo, Houston. We've concluded the VTR dump and we're standing by here again with you waiting for the burn.

CMP Roger. We're about to - to do it very shortly.

CC-H Okay. We're standing by.

MCC-H (Garble)
ACDR Okay.

ACDR Okay. Pitch 1 ON - Mark it. (Garble) Mark it.

CC-H Apollo, Houston. We had - we have four good gimbal

motors and good trams.

ACDR Rog. Same here.

CMP Looking good. We're all set.

CC-H Great.

ASTP (USA) MISSION MC68/1 Time: 18:30 CDT, 03:39 PET 7/15/75

USA (Garble)

CMP Hey Dick are you with us in reading your DSKY?

I'm with you Vance, go ahead - we're looking at the

DSKY now.

CC-H

CMP Okay our residuals are zero plus one zero. EMS is reading minus 10.8 after the burn, but we set it up at 7.2, and we'll explain it later.

CC-H Okay Vance, got it.

CMP Okay we were on attitude and on time and the first burn was sort of like getting hit by - bumped by a truck in the back.

CC-H Roger. When you guys get squared away and have the time, how about reading me the P52 data.

CMP Okay, Deke'll pass it on in just a second.

DMP We had star 42 and then 45. All balls minus 37, plus 9, plus 17, and we torqued at 03 to 650.

CC-H Okay, Deke, we copy, thank you very much.

CC-H And Apollo, Houston. We have not completed the VTR dump. We'll be getting back to that here in a few minutes so when you get to the step that says turn the VTR power to OFF on panel 400, skip that.

DMP Okay.

CC-H And Apollo Houston and we're going to - we're going to start up the VTR dump again so you'll lose down voice, and I'll give you a call when we're back up.

DMP Okay.

aboard the Apollo is being dumped the crew cannot converse with the ground. Some onboard TV recordered earlier of the crew activities in the Apollo cabin being dumped and recorded here on the ground from the onboard video tape recorder. Just completed was the Apollo circularization maneuver, which raised perigee slightly to - to circularize the Apollo orbit around 93 nautical miles. Vance Brand reported that the burn went off on time and on the proper attitude and his comments on experiencing his first service propulsion system burn was that it was like getting hit by a truck. The ATS 6 satellite is relaying the Apollo data and communications for about 55 percent of each orbit now. The high gain antenna on Apollo has been unfolded and latched onto the ATS-6 relay some 23 thousand miles in its orbit above Kenya and there's some 21 minutes remaining in this satellite relay pass.

ASTP (USA) MC69/1

Time: 18:40 CDT, 03:50 PET

7/15/75

CC-H Apollo, Houston. We've completed the VTR dump and we're back up here for the ATS again for about the next 10 minutes.

DWI

CC-H Apollo, Houston. We've completed the VTR

dump, we can go ahead and get the VTR power switch - just that one switch on panel 400 to OFF.

DMP It is power to OFF.

Okay.

CC-H Oh, I'm sorry. Excuse me, Deke. Do not do that.

We're still rewinding the tape recorder.

CC-H Apollo, Houston. Incidentally, I've got some high-gain angles for you. For the next ATS pass that comes up either - you can write either in the rendezvous book or the flight plan at about 4 hours and 42 minutes.

ACDR Go ahead.

CC-H Okay, Tom. The pitch is minus 66 and the yaw is 078.

ACDR Roger. Minus 66 and 078.

CC-H Roger. And be advised the VTR TV was real good. Just a reminder, don't forget that when you taking that with inner lever switch ON your hot - your intercom is getting put on the video.

ACDR Roger.

CMP Hope it wasn't too bad.

CC-H No, it was colorful. No problem.

ACDR Did you get the TV on TD&E, Dick? Over.

CC-H Yea, that was it, Tom. It was. We got some - some on - orbit TV before you switched the camera and then we watched the TD&E. It looked like a spectacular shot as you backed out of there.

ACDR Sounds great.

ASTP (USA) MISSION MC70/1 Time: 18:52 CDT, 04:02 PET

7/15/75

PAO This is Apollo Control. Loss of signal through ATS 6 satellite. Next acquisition in 14 minutes will be tracking station Hawaii. Meanwhile we're still estimating a change of shift briefing in the JSC main auditorium for around 7:30 eastern daylight with Flight Director Pete Frank and the Joint Flight Director who works with the Moscow Control Center on this shift, Frank Littleton. We'll return for the Hawaii pass in 13 minutes. During the press conference any airground will be taped for delayed playback. This is Apollo Control at 4:09 Apollo ground elapsed time.

ASTP (USA) MC71/1 Time: 19:02 CDT, 04:12 PET 7/15/75

PAO This is Apollo Control at 4 hours 21 minutes Apollo elapsed time. Flight director Pete Frank will arrive at the auditorium a few minutes ahead of his earlier estimated time. He's preparing to leave now, bringing with him his joint flight director, Pete - as you were - Frank Littleton. We're estimating their arrival at the auditorium at about 20 past the hour, 7:20 Central Daylight Time. A change of shift briefing will begin at that time. We're 40 seconds now away from acquisition through tracking station Hawaii. We'll carry that pass live but,, during the change of shift briefing, tape for delayed playback the stateside and subsequent ATS-6 satellite pass.

ASTP (USA) MISSION MC72/1 Time: 19:12 CDT, 04:22 PET 7/15/75

ACDR Hello, Houston - Apollo, how do you read?

CC-H Apollo Houston, how do you read?

ACDR Rog. You're loud and clear.

CC-H Okay Tom, if you'll give us ACCEPT we'll update your state vector and we got an NCl preliminary pad for you.

ACDR Houston Apollo .

CC-H Apollo Houston, I'm sorry we dropped into a short keyhole there and how do you read me now?

ACDR Roger. You're loud and clear, Dick.

CC-H Okay, I read you with a little bit of background noise but I can hear you okay Tom, and I've got a preliminary NCl when you're ready to copy.

ACDR Okay. We're ready to copy.

CC-H Okay, starting with NOUN 33. 005, 38, 29. 00; plus 063.5, plus 4 balls, plus 022.0; 181, 053, 001; 054.2, 00:03. The weight: 32818; trims plus 0.71, minus 0.45, go ahead.

ACDR Roger, 005, 38, 29:00; plus 063.5, plus all balls, plus 022.0; 181, 053, 001, 054.2, 00:03: weight, 32814; plus, 071; minus, 045.

w CC-H Roger Tom, that's a good readback. Let me tell you just a word just about the trajectory here. We've gotten some tracking that shows a little bit of out of plane. However, the FIDO thinks that this plane change is so small and it does'nt have a good handle on it, we've decided we will not do a plane change maneuver tonight. There may be an out of plane component and a phase and maneuver tomorrow or we might have to do one at some point tomorrow. But, at any rate, there will be no plane change maneuver tonight.

ACDR Understand. Real fine. Thank you.

CC-H Okay. Also, Tom, we do not have any CMC data here, so we've decided not to uplink the state vector in the blind; you can go back to BLOCK.

ACDR Roger, BLOCK.

CC-H Okay. Two more things. We're ready for the VTR power switch, that's just one switch on panel 400 to go OFF. And we're wondering how you're coming on doffing the suits.

ACDR You cut out, Houston.

CC-H Okay, Tom, we wanted the VTR power switch to OFF and we were wondering how you were doing in getting the suits off.

ACDR Okay, Vance's is off, and Deke put his in the bag, and mine's part way off.

CC-H Okay. I'll leave you alone.

CMP And we have the VTR power switch OFF.

ACDR Okay. VTR power switch is OFF.

CC-H Okay. Fine. Thank you.

CC-H Apollo, Houston. We are going LOS here, at Hawaii in about 15 seconds. I'll give you a call at Newfoundland at 4 plus 44. See you then.

ASTP (USA) MC73/1

Time: 19:22 CDT, 04:32 PET

7/15/75

PAO This is Apollo Control. Change of shift briefing with flight director Pete Frank should start momentarily in the JSC auditorium. We'll tape any air-to-ground from Apollo that takes place during this briefing for delayed playback. This is Apollo Control at 4 hours 33 minutes.

SPKR When do we want to start this?

SPKR (Garble)
SPKR Okey.

SPKR Okay. We have on your left flight director Pete Frank and on your right another flight director Mr. Frank Littleton.

ACTP (UCA) MC74/1

Time: 19:45 CDT, 04:55 PET

7/15/75

time. During this revolution the first of two phasing maneuvers will be performed. The first one at 5 hours, 38 minutes, 29 seconds, Apollo ground elapsed time, SPS burn of 67.2 feet which will raise apogee to 128.2 nautical miles, perigee remaining at 93.9. We have some compressed tape of the air/ground that was recorded during the just completed change of shift briefing which we will play now and go live as soon as that tape is exhausted.

CC-H Apollo, Houston through Newfoundland. How do you read?

CMP Loud and clear, Houston.

CC-H Roger. We're standing by and we'll have you on the ATS when the time comes and we get locked up. See you then. And also the -you're GO for the MCl with the preliminary pad. There's no final pad required.

CMP Understand. GO, NCl, with preliminary pad. We won't be getting a final.

CC-H That's right, Vance. Incidentally, after we get locked up on the ATS and have good data, we'll get your target load and state vector in - we did not get it in as you know in Hawaii.

CMP Understand.

Apollo, Houston. How do you read on ATS?

CMP Loud and clear on ATS.

CC-H Okay. If you'll give us ACCEPT, we'll get you a good state vector and a target load.

CMP Okay. You've got ACCEPT and POO and we're getting an echo from you.

CC-H Okay. I'm reading you loud and clear, Vance.

DMP That was another IO2 if you guys saw it.

CC-H Roger, Deke. Copy.

CMP We get one every ten minutes.

CC-H Rog.

DMP I'm eating my Gus Grissom memorial corned beef sandwich. It tastes delicious. (Garble).

CC-H (Laughter) Roger.

CMP And, Dick. When's it looking like the shift to PSM

will occur?

CC-H

CC-H What we're talking about, Vance, is doing a procedures - since we're not going to do the plane change tonight. What we're talking about is doing a procedure at about 6 hours and 40 minutes which is during the middle of an ATS pass to square away our little minor worries about the helium bubble and then we'll just shift for the TSM after that procedure is completed. And we'll be getting back to you very shortly about what that'll be. But we figured we'll let the MCl burn come and go.

CMP Roger.

CC-H Apollo, Houston. For somebody in the LEB on panel 230 we'd like the up telemetry switch to CENTER UP TELEMETRY.

DMP Okay.

ASTP (USA) MC74/2

Time: 19:45 CDT, 04:55 PET

7/15/75

CC-H Incidentally, we're having dropouts on the data so we're holding up on uplinking your loads until we have a - we can monitor them real well.

CMP Okay. We had seen you do some uplinking, among other things.

CC-H That's right. We're just trying to take it kind of slow the state vectors are in and the target load will be up when we can.

CMP Roger.

CC-H Okay. As I was talking, we got the target load in also, so you can go back to BLOCK.

CMP Roger. BLOCK.

PAO This is Apollo Control. That completes playback of the accumulated tape which was recorded during the change of shift briefing. We're now live for the remaining 33 minutes of the ATS-6 satellite relay pass.

7/15/75 DMP Houston, Apollo. CC-H Apollo, Houston. Go ahead. DMP Okay, Bo. Hey, would you like a little data on the (garble)? CC-H Roger, go ahead. CMP Okay. Stars 2 and 42 - it was all balls and then minus 33, minus 11, minus 2, (garble) 5, 35D. That must have been 505. I can't read my own writing. CC-H Roger. I copied star 242 all balls, minus 33, minus 11, minus 2, 5, 35, and I didn't get the last number. DMP It should have been 50515. CC-H 50515. Roger, copy. DMP Roger. (Garble) there, Bo. CC-H It's been quite awhile since you people been up there. DMP Doesn't seem that way. CC-H And Deke, while I have you, do you have a DM Delta-P? DMP (Garble) CMP Yes, we have that, Bo. It's minus .3, and that's the value that it's built up to since we put the hatch back in. Roger, understand. Minus .3 and it's built up to that since you put the hatch in. CMP Roger. DMP (Garble) information, the old biostack is running and we're (garble). CC-H Say again, Deke, we didn't copy that. DMP Roger. Vance activated the biostack and we are now about to start the (garble). CC-H Roger. CMP Advised that the biostack was activated at 4:58, Bo, and the light was on after it was activated.

Understand. 4:58 for the biostack.

END OF TAPE

ASTP (USA) MISSION MC75/1 Time: 19:55 CDT, 05:05 PET